```
=> d his

     (FILE 'HOME' ENTERED AT 08:00:43 ON 20 FEB 2004)
     FILE 'REGISTRY' ENTERED AT 08:00:59 ON 20 FEB 2004
L1       1 S EVANS BLUE/CN
L2       1 S AMARANTH/CN
           SEL NAME L1
     FILE 'CA' ENTERED AT 08:02:03 ON 20 FEB 2004
L3    2544 S L1 OR E1-9
L4   14246 S L2 OR AMARANTH OR AMARANTHE OR RUBINE OR RUBIN OR RED(2W)(2 OR 9 OR 27) OR
BORDEAUX S OR AZO RUBY S OR AZORUBIN S OR CRANBERRY RED OR DYE RED RASPBERRY OR FAST RED OR
NAPHTHOL RED S OR VICTORY SCARLET OR WHORTLEBERRY RED OR SOLAR RED O
L5     626 S L3-4 AND(BUFFER? OR BORATE OR BORIC OR BORAX)
L6      60 S L5 AND(NH3 OR AMMONIA OR AMMONIUM)
L7       7 S L3-4 AND(CLO2 OR CHLORINE(A)DIOXIDE)
L8     174 S L3-4 AND(CL2 OR CHLORINE)
L9     157 S L5 AND(REAGENT OR COLORIMET? OR PHOTOMET? OR SPECTROMET? OR SPECTROPHOTOMET? OR
SPECTROSCO?)
L10    374 S L6-9
L11   6105 S L3-4 AND PY<1968
L12    196 S L10 AND L11
L13    178 S L10 NOT L11
L14    171 S L13 NOT(POT OR EUROPIUM OR GALAXY OR NERVOUS)
L15    163 S L14 NOT(POLAROGRA? OR RADIOLY? OR CHLOROPROP? OR POLYPHOS?)
L16    152 S L15 NOT(ANTIBODY OR HOT ATOM OR ELECTROSPR? OR JELLYFISH OR THIN LAYER)
L17    132 S L16 NOT(MASS SPECTRO? OR ENZYM? OR COLLAGEN OR SPRUCE OR DRUG)
L18    115 S L17 NOT(POLYBAS? OR CHROMIUM OR ELECTROPHOR? OR COSMET? OR RAYLEIGH)
L19     99 S L18 NOT PY>1999
L20     16 S L18 NOT L19
L21      4 S L20 AND CHLORINE DIOXIDE
L22     88 S L19 NOT(HERB? OR CATHOD? OR PDC OR TEAR OR CYANO?)
L23     81 S L22 NOT(WATERBORNE OR CONGO OR ANTIBIO? OR ERIO OR PYROGAL?)
L24    160 S L12 NOT(RING OR CONDUCTIV? OR BHC OR THALLIUM OR ELECTROPHOR?)
L25    125 S L24 NOT(PYRID? OR CORN OR SCANDIUM OR HYDRAZINE OR CARBOWAX)
L26     83 S L25 NOT(CHROMIUM OR BROMO? OR PRESSURE SENSITIVE OR BETA)
L27    168 S L21,L23,L26

=> d bib,ab,it 1-168 l27

L27  ANSWER 3 OF 168  CA  COPYRIGHT 2004 ACS on STN
AN   132:273489  CA
TI   Studies of selectivity in the amaranth method for chlorine dioxide
AU   Emmert, G. L.; Coutant, D. E.; Sweetin, D. L.; Gordon, G.; Bubnis, B.
CS   Department of Chemistry and Biochemistry, Miami University, Oxford, OH, USA
SO   Talanta (2000), 51(5), 879-888
AB   Studies were designed to evaluate the amaranth method for measuring Cl dioxide in H2O.
Specifically, the effects of pH and temp. were examd. for the amaranth method.  The results
of interference studies are reported for free available Cl species, chlorite ion, chlorate
ion, Fe (III) ion, oxidized Mn, and monochloramine.  Addnl. research focused on selectivity
enhancement for Cl dioxide over free available Cl using NH3/ammonium chloride buffer and gas
diffusion-flow injection anal.  The results of method detection limit and accuracy and
precision studies are reported for measuring Cl dioxide in the presence of free available
Cl.

L27  ANSWER 4 OF 168  CA  COPYRIGHT 2004 ACS on STN
AN   132:202391  CA
TI   Colorimetry with amaranth or Evans Blue azo dyes for determination
     of residual chlorine dioxide in water
IN   Mantisi, Frederick; Gautier, Jean-Pierre
PA   Elf Atochem S.A., Fr.
SO   Eur. Pat. Appl., 9 pp.
```

PI EP 985929 A1 20000315 EP 1999-401774 19990715
WO 2000014530 A1 20000316 WO 1999-FR1727 19990715
PRAI FR 1998-11272 A 19980909
AB A **colorimetric** method for the detn. of residual **ClO2** (as water purifn. agent) in com. water supplies (esp. potable waters), consists of prepn. of an anal. soln. contg. an azo dye, with a color intensity modified by the presence of **ClO2**, in addn. to a **borate buffer** and one or more masking agents. The azo dye is **amaranth** or **Evans Blue**, which is present in 1 × 10-6 and 1× 10-3 M, preferably 2 × 10-5 and 8 × 10-4 M. The **borate buffer** is present in concn. of 5 × 10-3 and 0.1 M. The pH is then adjusted to 9.2 prior to **colorimetric** anal., at 521 nm for **amaranth** and 606 nm for **Evans Blue**.

L27 ANSWER 10 OF 168 CA COPYRIGHT 2004 ACS on STN
AN 129:235315 CA
TI Comparison of spectrophotometric methods for measuring **chlorine dioxide** in drinking water
AU Hofmann, R.; Andrews, R. C.; Ye, Q.
CS Dep. Civiyl Engineering, Univ. Toronto, Toronto, ON, M5S 1A4, Can.
SO Environmental Technology (1998), 19(8), 761-773
AB The recognition that **chlorine** disinfection of drinking water may not be effective in controlling such as Cryptosporidium may lead to the greater use of stronger alternative disinfectants, such as **chlorine dioxide**. Typical **chlorine dioxide** residual concn. requirements for disinfection may extend to less than 0.1 mg L-1, thus requiring very good quantitation methods for optimal process control. Traditional methods have been cumbersome and sometimes inaccurate. This study examd. three spectrophotometric methods for measuring **chlorine dioxide** in the <0.1 mg L-1 to 2 mg L-1 range, using acid chrome violet K (ACVK), lissamine green B, and **amaranth** reagents. Each methods was assessed using both lab. reagent water and various natural waters to identify the resp. linear range, method precision, and the possible interference from natural color due to aq. org. matter. Interferences arising from the presence of **chlorine**, chloramines, chlorite, chlorate, and permanganate were also evaluated, along with potential need to correct for temp. changes.

L27 ANSWER 12 OF 168 CA COPYRIGHT 2004 ACS on STN
AN 127:133104 CA
TI Liquid control solutions for blood analysis
IN Liffmann, Stanley M.
PA Bionostics, Inc., USA
SO Ger. Offen., 14 pp.
PI DE 19653082 A1 19970626 DE 1996-19653082 19961219
GB 2308444 A1 19970625 GB 1996-26333 19961219
PRAI US 1995-9010P P 19951221
AB Disclosed are liq. control stds. for use in CO-oximetry and electrolyte detn. for the diagnosis of respiratory-pulmonary diseases. A liq. control std. is an aq. soln. that contains an absorbing substance to provide a control which corresponds to a previously detd. level of Hb or Hb fraction and contains a sufficient concn. of a polyvinylpyrrolidone polymer to inhibit the spectral shift of the absorbing substance when the said absorbing substance is in the presence of Triton X 100 or other nonionic surfactants which are used in blood anal. to lyse erythrocytes. Alternatively, the liq. control std. is an aq. soln. that contains a previously detd. amt. of electrolytes and a sufficient concn. of a polyvinylpyrrolidone polymer to increase the accuracy of electrolyte detn. The liq. control stds. can contain ≥1 of the following components: electrolyte salts to provide controls for the corresponding ion-selective electrode systems, dyes or other absorbing substances to provide controls for the corresponding CO-oximetry system, and/or control means for blood gas-measuring systems that measure the pH, pCO2, and pO2 of blood and other sol. blood constituents (e.g., glucose, lactate, urea), whereby the components for blood anal. produce suitable control parameters.

L27 ANSWER 38 OF 168 CA COPYRIGHT 2004 ACS on STN
AN 101:166723 CA
TI **Reagents** for uric acid determination
PA Hitachi Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.

PI JP 59109200 A2 19840623 JP 1982-221015 19821215
PRAI JP 1982-221015 19821215
AB In uric acid detn. in, e.g., serum or urine by flow-injection differential absorption **spectrophotometry**, a **reagent** contg. uricase, peroxidase, **buffer**, and a dye which produces differential absorption of 0.01-1 at 2 wavelengths is used to eliminate the ghost peaks (pos. and neg. forms) due to the mixing effects of **reagents** at low concns. of uric acid. For example, a **reagent** contg. 4-aminoantipyrine, 3-methyl-N-ethyl-N-hydroxyethylaniline, uricase, peroxidase, aramanth, and Triton X 100 was mixed with sample soln. by the flow-injection system, and after reaction the differential absorbance was measured at 546 nm and 660 nm. The concn. of uric acid and the differential absorption was linearly related and the unknown concn. was detd. by a calibration curve.
IT 83-07-8 91-88-3 **314-13-6 915-67-3** 9002-12-4
(in uric acid detn. in body fluid by flow-injection differential **spectrophotometry**)

L27 ANSWER 39 OF 168 CA COPYRIGHT 2004 ACS on STN
AN 101:147316 CA
TI **Reagents** for cholesterol determination
PA Hitachi Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
PI JP 59109199 A2 19840623 JP 1982-221012 19821215
PRAI JP 1982-221012 19821215
AB In cholesterol detn. in, e.g., human blood serum, by flow-injection differential absorption **spectrophotometry**, a **reagent** contg. cholesterol oxidase, peroxidase in **buffer** and a dye which produces differential absorbance 0.01-1 at 2 wavelength is used to eliminate the ghost peaks (pos. and neg.) by mixing effects of **reagents** at low concns. of cholesterol. For example, a **reagent** contg. 4-aminoantipyrine, 3-methyl-N-ethyl-N-hydroxyethylaniline, Triton X 100, cholesterol esterase, cholesterol oxidase, peroxidase, and **amaranth** in phosphate **buffer** was mixed with sample in flow-injection system, and after reaction the differential absorbance was measured at 546 nm and 660 nm. The concn. of cholesterol and the peak height of differential absorption was linearly related and unknown concn. was detd. by a calibration curve.
IT 83-07-8 91-88-3 **314-13-6 915-67-3** 9002-93-1
(in cholesterol detn. by flow-injection differential **spectrophotometry**)

L27 ANSWER 40 OF 168 CA COPYRIGHT 2004 ACS on STN
AN 101:147315 CA
TI **Reagents** for glucose determination
PA Hitachi, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
PI JP 59109197 A2 19840623 JP 1982-221013 19821215
PRAI JP 1982-221013 19821215
AB For detn. of glucose in, e.g., blood serum, by flow-injection differential absorption **spectrophotometry**, a **reagent** contg. glucose oxidase, peroxidase, **buffer** and a dye which produces differential absorbance of 0.03-1 at 2 wavelengths is used to avoid the ghost peaks (pos. and neg.) which may originate from the **reagent** mixing effects at low concns. of glucose. For example, a **reagent** contg. 4-aminoantipyrine, phenol, glucose oxidase, peroxidase, and **amaranth** in phosphate **buffer** was mixed with sample soln. in flow-injection systems and after reaction, the differential absorbance was measured at 546 nm and 660 nm. The concn. of glucose and the peak height of differential absorbance was linearly related.
IT 83-07-8 108-95-2, uses and miscellaneous **314-13-6**
915-67-3 9001-37-0 9003-99-0
(in glucose detn. in blood serum by flow-injection differential **spectrophotometry**)

L27 ANSWER 41 OF 168 CA COPYRIGHT 2004 ACS on STN
AN 101:126339 CA
TI **Reagents** for determination of neutral lipids

PA Hitachi Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
PI JP 59109196 A2 19840623 JP 1982-221016 19821215
PRAI JP 1982-221016 19821215
AB For detn. of neutral lipids in, e.g., blood serum, by flow-injection differential absorption **spectrophotometry**, a **reagent** contg. lipoprotein lipase, glycerol kinase, glycerol phosphate oxidase, peroxidase, ATP, and Mg salt in **buffer** and a dye which produces differential absorbance of 0.01-1 at 2 wavelength is used to eliminate the ghost peaks (pos. and neg.) generated by the **reagent** mixing effects at low lipid concns. For example, a **reagent** contg. 4-aminoantipyrine, 3-methyl-N-ethyl-N-hydroxyethylaniline, Triton X 405, $MgCl_2$, lipoprotein lipase, glycerol kinase, glycerol phosphate oxidase, peroxidase, and **amaranth** in Tris **buffer** (pH 7.5) was mixed with serum sample in flow-injection system, and after reaction, the differential absorbance was measured at 546 nm and 660 nm. The concn. of lipids in sample and the peak height of differential absorbance was linearly related.
IT 83-07-8 91-88-3 **314-13-6 915-67-3** 7786-30-3
(in lipids detn. in blood serum by flow-injection differential absorption **spectrophotometry**)

L27 ANSWER 118 OF 168 CA COPYRIGHT 2004 ACS on STN
AN 58:72134 CA
OREF 58:12286h,12287a
TI Rapid determination of sulfur trioxide in cement by **colorimetry**
AU Hayashida, Hiromu; Einaga, Hisahiko
CS Onoda Cement Co., Ltd., Tokyo
SO Bunseki Kagaku (**1963**), 12, 47-54
AB Dissolve a 0.5-g. cement sample, to which 20 ml. H_2O has been added in 5 ml. HCl (1:1). Boil a few min. after adding 70 ml. H_2O, add NH_4OH (1:2) until neutral (purple) to chlorophenol red indicator. Filter the ppt. of Al+++ and Fe+++, and wash with 1% NH_4Cl. Take an aliquot of the filtrate, add a sufficient amt. of maleic acid to mask Ca++ and Mg++, and shake the resulting soln. (pH 5-6) with Th **borate-amaranth** dye **reagent** for 90 sec. at 14.5-20°. Filter off the exta **reagent**, measure the absorbance at 532 mμ, and calc. the SO_3 content from a calibration curve. By this method, satisfactory results are obtained in 30 min.

L27 ANSWER 151 OF 168 CA COPYRIGHT 2004 ACS on STN
AN 43:46664 CA
OREF 43:8430a-d
TI Determination of phenol in biologic material
AU Gomori, G.
SO Journal of Laboratory and Clinical Medicine (**1949**), 34, 275-81
AB Phenol can be detd. in urine, serum, etc., as follows: Mix 1.0 cc. of sample, 5.0 cc. of water, and 4.0 cc. of **borax** soln. (satd. **borax** soln. in 15% alc.), and 0.5 cc. of diazo **reagent** (dissolve 0.25 g. of Red B salt, National Aniline; or Naphthanil Diazo Red B, Dupont; or **Fast Red** Salt V, Ciba, in 100 cc. of ice-cold water and filter; then add 1.0 cc. of 5% H_2SO_4. This will keep 2 weeks). Read both water and sample against a blank, using a 490 mμ blue-green filter. Compare with a standard curve. The phenol range in gastric juice was 1.4 to 56.0 γ/cc.; in urine 0.9 to 44.0 γ Alk. phosphatase can be detd. as follows: Use King and Armstrong di-Na phenylphosphate (0.05 M **buffered** with acetate to pH 5 for the acid range, and with **borate** (0.1 M) to pH 9.8 for the alk. range). Incubate 60 min. at 37° and det. phenol as above. Lipase can be detd. as follows: To 5.0 cc. of prewarmed **buffered** substrate (blow 1.0 cc. of substrate stock soln. (2.0 g. of phenyl benzoate in 100 cc. of methanol) into 500 cc. of **buffer** (5.35 g. of $Na_2HPO_4.12H_2O$ and 7.0 g. of $NaH_2PO_4.H_2O$ in 1000 cc. of water; pH 6.3)) add 1.0 cc. of the unknown enzyme soln. (serum diln. 1:200, gastric juice 1:25, etc.) and proceed as for phosphatase.

=> log y
STN INTERNATIONAL LOGOFF AT 09:39:06 ON 20 FEB 2004